Code: 790-753

Q. 1.74

Date:

Printed: 22 JAN 1999

ENGELHARD MATERIAL SAFETY DATA SHEET

Product: L RAW UMBER NO. 46304

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Common Name : UNIVERSAL DISPERSION OF C.I. PIGMENT BROWN 7:X, AND

C.I. PIGMENT BLACK 7

Chemical Name : UNIVERSAL DISPERSION OF C.I. PIGMENT BROWN 7:X AND C.I.

PIGMENT BLACK 7

Formula : CHEMICAL MIXTURE
Product CAS No.: CHEMICAL MIXTURE
Product Use : Industrial pigment

Supplier : ENGELHARD CORPORATION, PIGMENTS & ADDITIVES GROUP

Address : 101 WOOD AVENUE

TMODED TEAM

City, St, Zip : ISELIN, NJ 08830-0770

Phone : 1-732-205-6913 FOR CUSTOMER SERVICE

1-502-775-7288 FOR ENVIRONMENT, HEALTH, AND

SAFETY

FOR CHEMICAL EMERGENCY CALL CHEMTREC (24 HOURS): 1-800-424-9300 (US, Canada, Puerto Rico, Virgin Islands)

1-202-483-7616 (Outside Above Area)

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAC NO

INGREDIENT	CAS NO.	% WC.
DIETHYLENE GLYCOL	111-46-6	10-20
ETHYLENE GLYCOL	107-21-1	10-20
WATER	7732-18-5	15-25

ENGELHARD MATERIAL SAFETY DATA SHEET	Page 2	Code: 790-753 Date:
C.I. PIGMENT BROWN 7	12713-03-0	15-25
MAGNESIUM SILICATE	14807-96-6	1-10
CALCIUM CARBONATE	1317-65-3	10-20
MANGANESE DIOXIDE	1313-13-9	1-5
ETHOXYLATED NONYL PHENOL	9016-45-9	1-5
SURFACTANT(S)	IN TSCA	1-5
CARBON BLACK	1333-86-4	< 1

NOTE: See Section 8 for Exposure Limits and Section 11 for Toxicological Information.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Brown liquid

Odorless

Flash Point: Not Determined

May cause severe eye irritation.

Harmful if inhaled, swallowed or absorbed through the skin.

Overexposure may cause gastrointestinal tract, central nervous system and kidney function disturbances.

Inhalation causes irritation of the respiratory tract, dizziness and drowsiness.

Excessive exposure to MANGANESE may cause neurological disturbances including muscle pain, spasms, hallucinations and uncontrollable behavior.

Not a fire or explosion hazard.

ROUTES OF ENTRY

Eyes? YES Skin? YES Inhalation? YES Ingestion? YES

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MATERIAL SAFETY DATA SHEET

POTENTIAL HEALTH EFFECTS

EYE CONTACT may cause severe eye irritation, redness, tearing and blurred vision.

SKIN CONTACT: Prolonged or repeated contact may cause irritation. Toxic amounts may be absorbed through the skin.

INHALATION: At room temperatures, exposures to vapors or mists are unlikely. Higher temperatures may generate vapors or mists sufficient to cause drowsiness and headache.

INGESTION of large amounts of DIETHYLENE GLYCOL may result in toxic effects on the central nervous system, gastrointestinal tract, kidney and liver. A single large amount may cause severe damage or be fatal.

NOTE: Laboratory animal studies indicate that GLYCOL ETHERS may cause reproductive effects.

NOTE: Inhalation of vapor and/or mist may be significant if material is heated or agitated/sprayed.

CARCINOGENICITY

IARC? NO NTP? NO OSHA? NO

CHRONIC HEALTH HAZARDS

Excessive exposure by any route may cause degeneration of the kidney and, to a lesser extent, the liver. In animal studies, formation of bladder stones and secondary bladder cancer has been observed.

Prolonged or repeated exposure may cause MANGANESE poisoning. "Manganism" is difficult to recognize. It is a Parkinsonian-like syndrome characterized by headache, anorexia, hypersomnia, loss of strength, spasms or pain in the muscles, possibly followed by uncontrollable behavior, hallucinations and confusion. Progression of the disease results in varied neurological manifestations such as disturbances of speech, vision, hearing, gait and balance; and tremors, as well as decreased pulmonary function and kidney and liver damage. Once established, manganism is irreversible and progressive, but not fatal.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

May adversely affect existing medical conditions such as renal, hepatic and neurological disorders.

NOTE: See Section 8 for Exposure Limits, Section 11 for Toxicological Information and Section 12 for Ecological Information.

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SECTION 4: FIRST AID MEASURES

EYE CONTACT: Flush eyes with plenty of water. If irritation develops, call a physician.

SKIN CONTACT: Procedures normally not needed. If skin contact occurs flush with plenty of water. If irritation develops, call a physician.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician.

INGESTION: Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: Not Determined Auto-Ignition: Not Determined

LEL: Not Determined UEL: Not Determined

NFPA HAZARD CLASSIFICATION

Health: 1 Flammable: 0 Reactivity: 0

HMIS HAZARD CLASSIFICATION

Health: 2* Flammable: 0 Reactivity: 0

* Indicates the possibility of chronic health effects. See Chronic Health Hazards in Section 3 for more information.

EXTINGUISHING MEDIA

Use water, carbon dioxide or foam.

SPECIAL FIRE FIGHTING PROCEDURES

Wear NIOSH/MSHA approved positive-pressure self-contained breathing apparatus and protective clothing as specified in 29 CFR 1910.156.

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UNUSUAL FIRE AND EXPLOSION HAZARDS

Not a fire or explosion hazard.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Contain spillage, soak up with inert absorbent and scoop into container for disposal. Notification of the National Response Center (800/424-8802) may be required. Refer to EPA, DOT and applicable state and local regulations for current response information.

It is recommended that each user establish a spill prevention, control and countermeasure plan (SPCC). Such plan should include procedures applicable to proper storage, control and clean-up of spills, including reuse or disposal as appropriate (see Section 13: Disposal Considerations).

NOTE In the event of an accidental release of this material, the above procedures should be followed. Additionally, proper exposure controls and personal protection equipment should be used (see Section 8: Exposure Control/Personal Protection), and disposal of the material should be in accordance with Section 13: Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

Wash thoroughly after handling. Keep away from food and feed products. Keep container closed. Protect from freezing.

Avoid breathing vapors or mists.

Avoid contact with eyes, skin and clothing.

Use only with adequate ventilation.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS INGREDIENT

PEL-OSHA

TLV-ACGIH

ENGELHARD MATERIAL SAFETY DATA SHEET	Page 6	Code: 790-753 Date:
DIETHYLENE GLYCOL CAS NO.: 111-46-6	None Established	None Established
ETHYLENE GLYCOL CAS NO.: 107-21-1	50 ppm Ceiling	39.4 ppm Ceiling
WATER CAS NO.: 7732-18-5	None Established	None Established
C.I. PIGMENT BROWN 7 CAS NO.: 12713-03-0	10 mg/m³ (Total dust)	5 mg/m³
MAGNESIUM SILICATE CAS NO.: 14807-96-6	2 mg/m³ (Containing no asbestos fibers, respirable dust)	asbestos fibers,
CALCIUM CARBONATE CAS NO.: 1317-65-3	15 mg/m³ (Total dust) 5 mg/m³ (Respirable dust)	10 mg/m^3
MANGANESE DIOXIDE CAS NO.: 1313-13-9	5 mg/m³ (as Mn) Ceiling	$0.2 \text{ mg/m}^3 \text{ (as Mn)}$
ETHOXYLATED NONYL PHENOL CAS NO.: 9016-45-9	None Established	None Established
SURFACTANT(S) CAS NO.: IN TSCA	None Established	None Established
CARBON BLACK CAS NO.: 1333-86-4	3.5 mg/m^3	3.5 mg/m³

Unless otherwise noted, all values are reported as 8-hour Time-Weighted Averages (TWAs) and total dust (particulates only). All ACGIH TLVs refer to the 1998 Standards. All OSHA PELs refer to 29 CFR Part 1910 Air Contaminants: Final Rule, January 19, 1989.

RESPIRATORY PROTECTION

A NIOSH/MSHA-approved respirator as necessary.

VENTILATION

General; local exhaust as necessary to control vapors and/or mists.

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PROTECTIVE EQUIPMENT

Chemical goggles. Rubber or neoprene gloves.

PERSONNEL SAMPLING PROCEDURE

For METALLIC COMPOUNDS: Air sampling: Refer to NIOSH Manual of Analytical Methods (NMAM), 4th Edition, Method 7300.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown liquid

Odor: Odorless

Boiling Point: Not Applicable Specific Gravity $(H, \bar{0}=1)$: 1 to 2 Melting Point: Not Applicable

Vapor Pressure (mm Hg): < 17.5 mm Hg at 20°C

Vapor Density (Air=1): Not Applicable

Evaporation Rate: Much < 1

% Solubility In Water: Dispersible

pH: 8 to 10

SECTION 10: STABILITY AND REACTIVITY

Stability: Generally considered stable.

Avoid: None expected.

INCOMPATIBILITY (Materials to Avoid)

None expected.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS

None expected.

Polymerization: Polymerization is not expected to occur.

Avoid: Not applicable.

SECTION 11: TOXICOLOGICAL INFORMATION

ENGELHARD MATERIAL SAFETY DATA SHEET	Page	8	Code: 790-753 Date:
CHEMICAL NAME	% Wt.	LD50	LC50
DIETHYLENE GLYCOL CAS NO.: 111-46-6	10-20	21,000 mg RAT oral	, Not Available
ETHYLENE GLYCOL CAS NO.: 107-21-1	10-20	5,500 mg/kg CHILD, oral	Not Available
WATER CAS NO.: 7732-18-5	15-25	Not Available	Not Available
C.I. PIGMENT BROWN 7 CAS NO.: 12713-03-0	15-25	Not Available	Not Available
MAGNESIUM SILICATE CAS NO.: 14807-96-6	1-10	Not Available	Not Available
CALCIUM CARBONATE CAS NO.: 1317-65-3	10-20	> 5000 mg/kg UNSPECIFIED	Not Available
MANGANESE DIOXIDE CAS NO.: 1313-13-9	1-5	422 mg/kg MOU subcutaneous	SE, Not Available
ETHOXYLATED NONYL PHENOL CAS NO.: 9016-45-9	1-5	1,310 mg/kg R oral	AT, Not Available
SURFACTANT(S) CAS NO.: IN TSCA	1-5	Not Available	Not Available
CARBON BLACK CAS NO.: 1333-86-4	< 1	120 mg/kg RAT intravenous	, Not Available

NOTE: See Sections 3, 8 and 12 for additional information.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY

No data available.

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ENVIRONMENTAL FATE

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

US EPA Waste Number: Not Regulated

This product, if disposed as received, is a non-hazardous waste on the basis of TCLP testing under current EPA Hazardous Waste Regulation as defined by 40 CFR Part 261 et al. Disposal/recycling/reclamation requirements will vary by location and type of disposal selected. Consult with state and local regulatory authorities.

NOTE Chemical additions, processing or otherwise altering this material may make the waste management information presented above incomplete, inaccurate or otherwise inappropriate.

As local regulations may vary; all waste must be disposed/recycled/reclaimed in accordance with federal, state, and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

INTERNATIONAL

UN Number: Not Regulated

UNITED STATES

EPA Waste Number: Not Regulated DOT Classification: Not Regulated

CANADA

PIN Number: Not Regulated TDG Class: Not Regulated

EC

DGL: Not Determined

SECTION 15: REGULATORY INFORMATION

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Date:

US FEDERAL REGULATIONS

TSCA: IN TSCA

SARA 311 AND 312 HAZARD CATEGORIES

IMMEDIATE (Acute) Health Hazard: YES DELAYED (Chronic) Health Hazard: YES

FIRE Hazard: NO

REACTIVITY Hazard: NO

Sudden Release of PRESSURE: NO

SARA SECTION 313 NOTIFICATION

This product contains a toxic chemical (or chemicals) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CHEMICAL NAME	CAS Number	% Wt.
ETHYLENE GLYCOL	100.01.1	10.00
MANGANESE DIOXIDE	107-21-1	10-20
	1313-13-9	1-5

OZONE DEPLETING SUBSTANCES (ODS)

This product neither contains nor is manufactured with an ozone depleting substance subject to the labelling requirements of the Clean Air Act Amendments 1990 and 40 CFR Part 82.

VOLATILE ORGANIC COMPOUNDS (VOC)

377 /L

US STATE REGULATIONS

VOLATILE ORGANIC COMPOUND (CARB): 550 /L

CANADIAN REGULATIONS

DSL/NDSL: DSL

WHMIS Classification: Class D Division 2 Subdivision A Class D Division 2 Subdivision B

EUROPEAN REGULATIONS

EINECS: Yes

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Date:

OTHER REGULATIONS

MITI (Japan): No

AICS (Australia): Yes

SECTION 16: OTHER INFORMATION

REVISIONS

Revision Number: 7

PREPARATION INFORMATION

Prepared By: Corporate Environment, Health & Safety Group

Phone Number: See Section 1

The information in this Material Safety Data Sheet should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, and management and for persons working with or handling this product. The information presented in the MSDS is premised upon proper handling and anticipated uses and is for the material without chemical additions/alterations. We believe this information to be reliable and up-to-date as of the date of publication, but make no warranty that it is. Additionally, if this Material Safety Data Sheet is more than three years old, please contact the supplier at the phone number listed in Section 1 to make certain that this sheet is current. Copyright Engelhard Corporation. License granted to make unlimited copies for internal use only. End of MSDS.....